UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, v. MICROSOFT CORPORATION, Defendant.	Civil Action No. 98-1232 (TPJ)
STATE OF NEW YORK, ex rel. Attorney General DENNIS C. VACCO, et al., Plaintiffs and Counterclaim-Defendants, v. MICROSOFT CORPORATION, Defendant and Counterclaim Plaintiff.	Civil Action No. 98-1233 (TPJ)

MEMORANDUM AND ORDER

On May 18, 1998, in separate actions, the United States Department of Justice ("U.S." or "DOJ") and twenty states' Attorneys General (the "States")[1] filed complaints against Microsoft Corporation ("Microsoft"), alleging violations of federal and numerous state antitrust statutes. The DOJ and the States also applied separately for preliminary injunctive relief to prevent

1 This memorandum refers to the U.S. and the States collectively as "plaintiffs."

irreparable harm to competition in an alleged market for Internet browsers and to potential competition in the market for personal computer ("PC") operating systems. The Court consolidated the cases pursuant to Fed. R. Civ. P. 42(a) and advanced and consolidated the trial of both actions on the merits with the hearing of plaintiffs' preliminary injunction applications, pursuant to Fed. R. Civ. P. 65(a)(2). The hearing/trial is scheduled to begin on September 23, 1998.

The complaints allege essentially the same antitrust violations, namely, that Microsoft: (1) unreasonably restrained competition by "tying" its Internet browser to Windows 98; (2) unreasonably restrained competition by entering into "exclusive dealing" arrangements with various Internet providers; (3) unreasonably restrained competition by imposing "boot and start-up screen" restrictions on original equipment manufacturers ("OEMs"); (4) illegally maintained a monopoly in its operating system software through various exclusionary and predatory practices, including, but not limited to, the tying and exclusive dealing arrangements; and (5) attempted to monopolize the market for Internet browsers. The States bring a separate claim of monopoly "leveraging," arguing, inter alia, that Microsoft has unlawfully used its operating system monopoly to obtain a competitive advantage in the browser market. Each state also brings a pendent claim alleging violations of its respective state's antitrust laws.

The U.S. and the plaintiff States seek virtually the same relief, namely, that the Court enjoin Microsoft from: (1) entering into or enforcing certain contractual provisions which allegedly foreclose distribution and/or promotion of competing Internet browsers; (2) distributing a "bundled" version of its operating system and browser unless Microsoft provides a practical way of removing browser functions and provides OEMs that do not wish to license the browser an appropriate deduction from the royalty fee; (3) distributing a "bundled" version of its operating system and browser unless Microsoft treats Netscape Corporation's ("Netscape") browser the same as its own with respect to inclusion and removal; and (4) retaliating against any OEM that chooses to remove Microsoft's browser from Windows 98.

Microsoft denies the allegations, and moves for summary judgment on all counts. The Court finds sufficient material facts to be in dispute to preclude the entry of summary judgment on all but one of plaintiffs' claims. Because the theory of "monopoly leveraging" is inconsistent with both the Sherman Act's plain text and with Supreme Court pronouncements on the general limitations of its reach, the Court will grant summary judgment in favor of Microsoft on the States' Third Claim for Relief. See States' First Am. Compl. at 26. In all other respects the motion will be denied.

I.

A microprocessor[2] is the "brain" of the PC. Most of the world's PCs run on the "x86/Pentium" class of microprocessor, originally designed by Intel Corporation. In addition to the processor, the PC consists of a number of other components, including various hardware devices (e.g., disk drives) and the operating system.

The operating system ("OS") is the "command center" of the personal computer. It controls the interaction between the processor, memory, peripheral devices such as keyboards, screens, disk drives, and printers. Independent software vendors ("ISVs") write software application programs (such as word processors, games, etc.) that rely on certain general functions

[2] The microprocessor is sometimes referred to as the "processor," the "microchip" (or simply "chip"), or the central processing unit ("CPU").

embedded in the OS. Applications software does this by using (or "calling on") the OS's application programming interfaces ("APIs"). Because those functions reside on the OS, ISVs do not have to write them into every software application they develop.

In 1980, Microsoft licensed from another company a PC operating system which it modified and introduced in 1981 as the "Microsoft Disk Operating System" ("MS-DOS"). When IBM entered the PC market in 1981, it selected MS-DOS as its operating system. As a result, MS-DOS enjoyed enormous sales and eventually commanded a dominant share of the market.

In 1985, Microsoft introduced a product called "Windows." Originally, Windows was a "shell," which acted as a graphical interface between the user and the MS-DOS operating system, permitting the user to perform functions by pointing and clicking with his mouse, rather than by typing text. Windows and MS-DOS were originally offered and sold separately, but Microsoft combined the underlying operating system with the graphical user interface in "Windows 95," presently the most widely-used PC operating system in the world.

The Internet is a global network that links smaller networks of computers. The World Wide Web ("Web") is the fastest-growing part of the Internet, composed of multimedia "pages" written in Hypertext Markup Language ("HTML") and connected to other pages by hypertext links. "Browsers" are specialized software programs that allow PC users to locate, access, and display content and applications located on the Web, by, among other things, "translating" HTML into an intelligible format for the user.

Consumers most often obtain their browsers as preinstalled software from their OEMs or via downloads from their Internet Access Providers ("IAPs"). IAPs provide users with telephone numbers and software that their computers use to access the Web. There are two types of IAPs:

(1) Online Service Providers ("OLSs") (e.g., America Online, Prodigy, CompuServe, Microsoft Network) offer a full range of online services in addition to Web access, including e-mail, news, entertainment, and places to "meet" people with similar interests; and (2) Internet Service Providers ("ISPs") (e.g., AT&T Worldnet, Mindspring, Netcom) offer a cheaper, more "bare bones" package, including e-mail, Web access, and basic software.

On July 15, 1994, the U.S. commenced an action against Microsoft under Section 2 of the Sherman Act, 15 U.S.C. § 2 ("§ 2"). The complaint alleged, among other things, that Microsoft had entered into anticompetitive agreements and engaged in unlawful marketing practices directed at OEMs. The effect of those practices, the DOJ alleged, was unlawfully to maintain Microsoft's monopoly in the PC operating system market.

Microsoft ultimately consented to the entry of a "Final Judgment" (or "Consent Decree"), which the Court entered on August 21, 1995. The Consent Decree prohibited Microsoft from continuing the challenged practices and from engaging in other anticompetitive behavior.

On October 20, 1997, the U.S. petitioned the Court for an order to show cause why Microsoft should not be found in civil contempt for violating the terms of the Consent Decree by requiring OEMs to license and distribute Microsoft's Internet browser ("Internet Explorer" or "IE") as a condition of obtaining a license for Microsoft's Windows 95 operating system. On December 11, 1997, the Court declined to hold Microsoft in contempt, but preliminarily enjoined the company from continuing the challenged licensing practices. See United States v. Microsoft Corp., 980 F. Supp. 537 (D.D.C. 1997).

Microsoft appealed the December 11 Order. The D.C. Circuit reversed and remanded, holding that the Court "erred procedurally in entering a preliminary injunction without notice to

Microsoft and substantively in its implicit construction of the consent decree on which the preliminary injunction rested." See United States v. Microsoft Corp., 147 F.3d 935, 938 (D.C. Cir. 1998) ("Microsoft"). The D.C. Circuit also granted Microsoft's application for a writ of mandamus revoking the Court's reference of certain matters to a special master. See id.

The Court of Appeals "tentatively" concluded that Windows 95/IE is a permissible "integrated product" under the applicable terms of the Consent Decree. Id. at 953. An "integrated product," the court held, is one "that combines functionalities (which may also be marketed separately and operated together) in a way that offers advantages unavailable if the functionalities are bought separately and combined by the purchaser." Id. at 948. The D.C. Circuit concluded that Microsoft had "clearly met the burden of ascribing facially plausible benefits to its integrated design as compared to an operating system combined with a stand-alone browser," id. at 950, but left the issue to be finally decided based "on a more complete record." Id. at 952.

II.

Plaintiffs contend, and for present purposes, the Court must assume, that Microsoft enjoys a monopoly in the market for operating systems that are compatible with Intel x86/Pentium microprocessors.[3] According to the DOJ's economic expert, between 1991 and 1997, Microsoft's share of that market held consistently at approximately 90%. See Declaration of

[3] Microsoft disputes plaintiffs' definition of the "relevant markets" and their allegations of Microsoft's power within those markets. Microsoft recognizes, however, that these issues are "sharply disputed by the parties" and are "typically resolved in a battle among expert economists" at trial. See Def.'s Mem. in Opp'n to Pls.' Mots. for Prelim. Inj. at 2, 3. Microsoft concedes that, for purposes of deciding its motion for summary judgment, the Court must assume that Microsoft is a monopolist in a relevant market.

David S. Sibley [4] ("Sibley Decl.") ¶ 14 (citing International Data Corp., Operating Environments, Review and Forecast 1996-2001 (1997)). Several OEMs, including Packard Bell, Hewlett Packard, Micron, and Gateway, have expressed their belief that they have no commercially reasonable alternative to Microsoft's operating system. Plaintiffs postulate that Microsoft's dominant position in the market is reinforced by high barriers to entry, most importantly its enormous "installed base" and the large number of software applications that run on Windows but not on other operating systems.

Despite its strong position in the market for operating systems, internal Microsoft correspondence indicates that the company recently discerned a threat to its operating system monopoly in the growing popularity of Internet browsers. Because browsers offer the potential to overcome the incompatibility between different operating systems by allowing applications to run on a variety of operating systems, browsers threaten to reduce or eliminate the key barrier to entry that protects Microsoft's share of the operating systems market.

Software created to run on particular operating systems (or "platforms") generally will not function on different platforms. Independent software vendors ("ISVs") must, therefore, choose the platforms for which they will develop and support different versions of their software. See generally Sun Microsystems, Inc. v. Microsoft Corp., 999 F. Supp. 1301, 1302 (N.D. Cal. 1998). Because of Windows' dominant market share, ISVs naturally write their applications to run on Windows, leading to "network effects" that support Microsoft's high market share; the more applications that are written for a particular OS, the more attractive will consumers find that OS, thus further increasing market share, leading to more new software applications, and so forth.

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[4] Dr. Sibley is a Professor of Economics at the University of Texas at Austin.

A new programming language, known as "Java,"[5] is designed in part to permit applications written in it to run on any platform or operating system ("across platforms"), thus permitting ISVs to create and distribute a single version of their software capable of operating on many otherwise incompatible system platforms and browsers. Programs written in Java are compiled into intermediate instructions which are then "interpreted" by another computer program which emulates a hypothetical CPU called a "Java Virtual Machine" ("JVM"). The JVM translates the instructions into language that can be understood by the specific CPU on which the JVM is running.

Netscape Corporation's ("Netscape") "Navigator" browser is one means by which Java is distributed to consumers, since a JVM component is shipped with Netscape's browser. See P. Maritz (Vice President in charge of Microsoft's Platforms Group) 7/14/97 e-mail (recognizing Netscape as "the major distribution vehicle" for Java) (Ex. 61 to Pls.' Joint Resp. to Microsoft's Mot. for Summ. J. & Reply in Supp. of Mots. for Prelim. Inj.).[6] Furthermore, Navigator is itself a "platform" to which many applications are written.

The more applications written directly to the browser or the JVM it hosts, the more fungible the underlying operating system becomes. Because browsers such as Navigator will run on any operating system, and have the ability to host "cross-platform" applications, they pose a potential threat to Windows' dominance.

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5 Java was developed by Sun Microsystems, Inc ("Sun").

6 This memorandum refers to exhibits attached to DOJ's preliminary injunction application as "PI Ex."; the States' preliminary injunction exhibits as "States' PI Ex."; Microsoft's summary judgment exhibits as "SJ Ex."; and plaintiffs' exhibits in opposition thereto as "SJ Opp'n Ex."

Certain statements of Microsoft executives proffered by plaintiffs indicate that the company recognized the impending danger. For example, Microsoft CEO Bill Gates stated that the Netscape/Java combination threatens to "commoditize" the operating system. See B. Gates 5/26/95 e-mail (PI Ex. 2). Following a 1997 meeting with Mr. Gates, Microsoft's Ben Slivka described Java as "the biggest threat to Microsoft" and wrote to Mr. Gates that "clearly the work the Java team is doing has hit a raw nerve with you." SJ Opp'n Ex. 60. And in an essay posted on Microsoft's Web site, Mr. Gates recognized the potential of Netscape's browser to "become a de facto platform for software development, ultimately replacing Windows as the mainstream set of software standards." States' PI Ex. 3. Other Microsoft executives recognized browsers as "alternative *platform[s]* to Windows," B. Silverberg Internet Platforms & Tools Div. Mtg. Agenda (emphasis in original) (PI Ex. 33), that might eventually "obsolete" Windows. B. Chase 4/4/97 e-mail (PI Ex. 15). One Vice President warned that "[t]he situation is threatening our operating systems and desktop applications share at a fundamental level," and declared: "Netscape pollution must be eradicated." J. Raikes 8/13/96 memo (PI Ex. 34).

Microsoft allegedly set out to eliminate the threats posed by Java and Netscape. Plaintiffs contend that Mr. Gates led the charge to "wrest control of Java away from Sun," SJ Opp'n Ex. 60, and to convert Java to what Microsoft called a "polluted" version which would effectively limit applications to those which would run on Microsoft's systems. To accomplish this goal, Microsoft allegedly entered into a series of anticompetitive agreements with customers and competitors to restrict the use of Java and to substitute the use of Microsoft's version of Java, known as "J/Direct." See, e.g., T. Nielsen 8/25/97 e-mail to B. Gates ("[W]e are just proactively trying to put obstacles in Sun's path and get anyone that wants to write in java to use J/Direct.") (SJ Opp'n Ex. 62).

According to plaintiffs, while Microsoft was combating Sun's Java on one front, it simultaneously set its sights on Netscape. In July of 1996, plaintiffs contend, Netscape enjoyed a 48% share of the browser market, compared to Microsoft's 11%. See Microsoft 11/11/96 "Internet Explorer Marketing Plan Review" (States' PI Ex. 26). Microsoft allegedly made it "job #1" to remedy that disparity. See, e.g., P. Maritz 6/20/96 e-mail (PI Ex. 92). But to accomplish that job, plaintiffs claim, Microsoft was unwilling to compete on the merits of Internet Explorer alone.

According to plaintiffs, Microsoft's strategy depended largely on leveraging its strong position in the operating systems market to gain a foothold in the market for browsers. Once again, plaintiffs rely heavily on contemporaneous statements of Microsoft executives to support their claims. For example, Jim Allchin, a Microsoft Senior Vice President, wrote: "I don't understand how IE is going to win. The current path is simply to copy everything that Netscape does packaging and product wise . . . My conclusion is that we must leverage Windows more . . . We need to advantage Windows -- more specifically [Windows 98]." PI Ex. 94.

Moshe Dunie, another Microsoft Vice President, wrote in an e-mail to Mr. Gates and several other executives: "The stunning insight is this: To make [consumers] switch away from Netscape, we need to make them to upgrade [sic] to [Windows 98] . . . [W]e can leverage these assets to convert the Navigator installed base and eclipse Netscape's browser market share leadership. But if we rely on IE4 alone to achieve this, we will fail." See M. Dunie 2/24/97 e-mail (States' PI Ex. 1). Microsoft executive Christian Wildfeuer apparently agreed: "It seems clear that it will be very hard to increase browser market share on the merits of IE 4 alone. It will be more important to leverage the [operating system] asset to make people use IE instead of Navigator." C. Wildfeuer 2/24/97 e-mail (PI Ex. 23).

Microsoft representatives met with top executives from Netscape on June 21, 1995. The parties disagree vehemently regarding the substance and purpose of that meeting. Plaintiffs allege that Microsoft proposed an illegal market allocation, with Microsoft becoming the sole supplier of browsers for use with Windows and with Netscape becoming the sole supplier for other PC platforms, such as Apple and UNIX. Plaintiffs contend that this proposal was consistent with a pattern of Microsoft's behavior that included similar discussions with Intel (to urge Intel not to continue to develop certain software), Apple (to persuade Apple to stop marketing its "QuickTime" media streaming software for use with Windows), and a company called Real Networks (seeking Real Network's assurances that it would get out of the base streaming media platform business and not share its technology with Microsoft's competitors).

Plaintiffs claim that Netscape refused the market allocation offer, causing Microsoft to adopt a two-part strategy to gain market share for IE. First, it began to distribute IE free of charge. One Microsoft Vice President, Paul Maritz, allegedly told Intel Corporation executives that Microsoft intended to "cut off [Netscape's] air supply. Everything they're selling, we're going to give away for free." <u>See</u> Steve Lohr & John Markoff, <u>Why Microsoft is Taking a Hard Line With the Government</u>, N.Y. Times, Jan. 12, 1998, at D1 (PI Ex. 4).

Plaintiffs further charge that Microsoft was not content with pricing Netscape out of the market, but was also determined to cut off Netscape's means of distributing its product. According to internal Microsoft documents, consumers most often obtain their browsers from their IAPs or as preinstalled software from their OEMs; approximately 43% of all browser users obtain their software from one of those two sources.[7] In deposition testimony, Microsoft executives acknowledged that the ISP channel and the OEM channel are the two most important channels for distribution. See, e.g., Myhrvold Dep. at 43:7-18.

Plaintiffs contend that Microsoft used a variety of illegal means to ensure that significant market participants did not distribute Netscape's browser through either the IAP or OEM channel. Microsoft allegedly accomplished its purpose by: (1) implementing an illegal tie between IE and Windows, purchased of necessity by virtually every OEM for installation on new PCs; and (2) using its control over a monopoly asset – "real estate" on the Windows desktop – to restrict IAPs and Internet Content Providers ("ICPs")[8] from offering their customers competing browsers.

In addition to a direct assault on Netscape's major channels of distribution, plaintiffs allege, Microsoft used its monopoly power to induce major computer industry firms, including Apple and Intel, to limit or reduce their use of and support for Netscape's browser. As a result of the totality of Microsoft's efforts, plaintiffs contend, its share of the browser market increased from 3% or 4% in early 1996 to approximately 50% in early 1998.

Plaintiffs concede that Microsoft's dominance in the operating system market does not, by itself, warrant concern. There is no reason to believe that the market, left to itself, will not generate alternatives to Windows, despite the high barriers to entry. See Sibley Decl. ¶ 17. Historical precedent, for example, demonstrates that compact disc technology was able to

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[7] Twenty-five percent obtain their browser from their place of employment, 13% by "downloading" it from the Internet, and 4% at retail. See Microsoft 4/97 "IE Market Review" (States' PI Ex. 25).

[8] Internet Content Providers are firms such as Disney, Hollywood Online and CBS Sportsline, that provide news, entertainment, and other information from sites on the Web.

overcome similar barriers in the music industry and overtake the LP as the standard medium for recording music. The antitrust laws are implicated, however, if it can be shown that Microsoft constructed *artificial* entry barriers that further restrict the naturally difficult task of providing alternatives to Microsoft's operating system.

Plaintiffs contend that Microsoft's behavior, including the bundling of its browser with Windows and the contractual restrictions on the use of competing browsers by OEMs, IAPs and ICPs, was designed to enable Microsoft to monopolize the browser market. The intended result was twofold: first, to remove the Internet browser as a software platform that can exert competitive pressure on Microsoft's operating system monopoly; and second, to establish for Microsoft a new monopoly in the browser market. Such conduct, plaintiffs allege, violates Sections 1 and 2 of the Sherman Act.[9]

III.

"A tying arrangement is an 'agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product, or at least agrees that he will not purchase that product from another supplier.'" Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 461 (1992) (quoting Northern Pac. Ry. Co. v. United States, 356 U.S. 1, 5-6 (1958)). Such arrangements are "per se" Section 1 violations, i.e., conclusively unreasonable if proven, when the seller exploits its market power in the tying product market "to force the buyer into the purchase of a tied product that the buyer either did not want at all, or

[9] Section 1 of the Sherman Act prohibits "[e]very contract, combination . . ., or conspiracy, in restraint of trade or commerce." 15 U.S.C. § 1. Section 2 proscribes the "monopoliz[ation], or attempt[ed] monopoliz[ation], or combin[ation] or conspir[acy] . . . to monopolize any part of the trade or commerce among the several States." 15 U.S.C. § 2.

might have preferred to purchase elsewhere on different terms," Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 12 (1984),[10] and a "substantial volume of commerce in the tied market" is affected. See Eastman Kodak, 504 U.S. at 462; see also Foster v. Maryland State Savs. & Loan Ass'n, 590 F.2d 928, 931 (D.C. Cir. 1978) (arrangement must affect a "not insubstantial" volume of commerce).

"Before an unlawful tying arrangement may properly be found, . . . it must be determined that 'two separate products are in fact involved.'" See Foster, 590 F.2d at 931 (quoting Fortner Enters., Inc. v. United States Steel Corp., 394 U.S. 495, 507 (1969)). In the typical case, whether a package consists of one or more "separate" products depends "not on the functional relation" between the components, "but rather on the character of the demand" for them. See Jefferson Parish, 466 U.S. at 19; see also Klamath-Lake Pharm. Ass'n v. Klamath Med. Serv. Bureau, 701 F.2d 1276, 1289 (9th Cir. 1983) ("Products that function together and are sold in combination may still be 'separate' if consumers would prefer to buy them individually at the price necessary to market them separately . . . It is the relationship of the producer's selling decision to market demand, not the physical characteristics of the products alone, that determines the existence of legally separable products."). The critical question is whether the bundle consists of products which are "distinguishable in the eyes of buyers." Jefferson Parish, 466 U.S. at 19. Courts generally find two products to exist if there is "sufficient consumer demand so that it is efficient for a firm to provide" them separately, Eastman Kodak, 504 U.S. at 462, even if the products are "functionally linked" so that one is "useless without the other." Id. (quoting Jefferson Parish, 466 U.S. at 19 n.30).

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[10] In Jefferson Parish, four concurring Justices would have abandoned the per se rule. Id. at 32.

Microsoft argues that Jefferson Parish's "demand" test does not apply to cases involving physically integrated products or questions of product design. Microsoft distinguishes Jefferson Parish on the ground that it dealt not with an integrated *product*, but with a "functionally integrated package of *services*." See Jefferson Parish, 466 U.S. at 19 (emphasis supplied). Similarly, Eastman Kodak dealt with the question of whether replacement parts and *service* for Kodak's photocopiers were separate products. See Eastman Kodak, 504 U.S. at 459.

Microsoft advances a theory that courts considering tying claims involving physically integrated products or questions of product design – like the Windows 98/IE combination – have applied a much more deferential standard. Such "technological tying" claims, Microsoft contends, can succeed only if plaintiffs prove that the challenged combination was carried out *solely* for the purpose of tying two separate products together "rather than to achieve some technologically beneficial result." See Response of Carolina, Inc. v. Leasco Response, Inc., 537 F.2d 1307, 1330 (5th Cir. 1976). Any other rule, Microsoft argues, "would enmesh the courts with technical and uncertain inquiry into the technological justifiability of functional integration and cast unfortunate doubt on the legality of product innovations in serious detriment to the industry and without any legitimate antitrust purpose." See Telex Corp. v. IBM, 367 F. Supp. 258, 347 (N.D. Okla. 1973), rev'd on other grounds, 510 F.2d 894 (10th Cir. 1975).

Microsoft's argument has its genesis in a body of case law addressing claims that, in the 1960s and 1970s, IBM illegally tied the central processing unit of its computers to various peripheral devices, such as disk drives. The peripheral devices and the CPUs were originally manufactured and sold separately and connected to each other with cables. As IBM developed new technologies with more compact circuitry, it was able to place many devices in one box along with the CPU, and to sell the combination as one unit. Naturally, the effect was to injure small manufacturers who were in the business of producing the peripheral devices.

Courts generally concluded that IBM's integrations did not amount to illegal tying, holding that "where a court is dealing with what is physically and in fact a single product," the antitrust laws do "not contemplate judicial dissection of that product into parts and the reconstitution of these parts into a tying agreement." See Telex, 367 F. Supp. at 347 (denying claim that IBM's "integration of additional memory and control functions" into its CPUs constituted unlawful tying, even though the court found IBM to be a monopolist, and that there was evidence that IBM's actions "were designed to help stem the growth of its plug compatible competition"); see also Innovation Data Processing, Inc. v. IBM, 585 F. Supp. 1470, 1476 (D.N.J. 1984) (integration of "dump-restore" utility into mainframe operating system held to be "a lawful package of technologically interrelated components"); ILC Peripherals Leasing Corp. v. IBM, 448 F. Supp. 228 (N.D. Cal. 1978) (disk drive and head/disk assembly ("HDA") combination lawful), aff'd per curiam sub nom., Memorex Corp. v. IBM, 636 F.2d 1188 (9th Cir. 1980). So long as the evidence demonstrated that the challenged integration "represented technological advancements," the courts generally held that IBM's decision to integrate additional functionality into its CPUs could not "be fairly regarded as predatory within the contemplation of antitrust policy." Telex, 367 F. Supp. at 342.

In a more recent case, the Ninth Circuit considered a tying challenge to Kodak's decision to simultaneously introduce its "110 Instamatic" camera, a new film and developing process, and the equipment necessary to process the new film. See Foremost Pro Color, Inc. v. Eastman Kodak Co., 703 F.2d 534 (9th Cir. 1983). One of Kodak's competitors in the photofinishing business alleged an unlawful tying arrangement because "the 110 system was incompatible with then existing photographic products and photofinishing equipment." Id. at 544. The Ninth Circuit rejected the claim, "even if . . . effective use of any one of the new products necessitates purchase of some or all of the others." Id. at 543. "Any other conclusion," the court reasoned, "would unjustifiably deter the development and introduction of those new technologies so essential to the continued progress of our economy." Id.

In the IBM cases, plaintiffs unsuccessfully challenged IBM's right to *bundle* two technologically related products. The allegations in the present case differ from the IBM allegations in one critical respect: plaintiffs allege that Microsoft did not just bundle IE into Windows 98, but took the further step of *contractually* prohibiting OEMs from *unbundling* the two (assuming that IE could be "unbundled" from the operating system, a disputed issue of fact).[11] In contrast, in the Telex case, there was no *forced* tie of memory and control functions. The integration was "wholly optional," 367 F. Supp. at 347, and IBM continued to offer the two products separately. Id. Similarly, in Innovation Data Processing, IBM continued to license the utility program and the operating system separately as well as together, at the user's option. 585 F. Supp. at 1475.[12] And Foremost Pro Color did not involve the bundling of products at all,

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[11] Plaintiffs rely on the Declaration of Edward W. Felten, Assistant Professor of Computer Science at Princeton University, for the proposition that Web browsing functionality can be removed from Windows 98 without damaging the underlying operating system. Whether Dr. Felten's "mechanism," see Felten Decl. ¶ 7, actually removes the "browser," or merely removes code that "look[s] more like a key to opening IE than anything that could plausibly be considered IE itself," Microsoft, 147 F.3d at 952 n.17, remains to be seen.

[12] That court went on to state that, even had IBM not offered the products separately, there would be no unlawful tie because the items were part of a single product. Innovation Data Processing, 585 F. Supp. at 1476. Following Jefferson Parish, however, the court revisited its decision, emphasizing that the basis for its original decision was the finding of no coercion, and declining to reach the "separate product" question. See Innovation Data Processing v. IBM, 603 F. Supp. 646, 648-49 (D.N.J. 1984).

but rather Kodak's development of new technological formats that rendered competitors' complements incompatible. "The *development and introduction*" of those formats, "*standing alone*" (without any contractual requirement that users take the products together) was deemed not to amount to tying. See Foremost Pro Color, 703 F.2d at 542 (emphasis supplied).[13]

Unlike the IBM plaintiffs, neither the U.S. nor the States challenges Microsoft's right to bundle IE and Windows. Instead, they challenge the contractual prohibitions against unbundling, and Microsoft's refusal to offer what plaintiffs allege are two products separately. The cases Microsoft cites in opposition are not inconsistent with the teaching of Jefferson Parish and Eastman Kodak that it is for the *market* (and not Microsoft) to determine whether the bundling is desirable. See also Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 287 (2d Cir. 1979) ("[N]o one can determine with any reasonable assurance whether one product is 'superior' to another . . . The only question that can be answered is whether there is sufficient demand for a particular product to make its production worthwhile, and the response, so long as the free choice of consumers is preserved, can only be inferred from the reaction of the market."). The market can make that determination only if two bundled products are also offered in their unbundled form, as they were in the IBM cases.

[13] Plaintiffs also distinguish the ILC case. There, the court found that the drive unit and head/disk assembly were a single product because: they were designed to be and would be used as a unit; the aggregation offered dramatically larger online storage capacity; the aggregation satisfied a recognized customer need; the aggregation resulted in cost savings that were passed on, at least in part, to end users; the drive unit and head/drive assembly were normally used in fixed proportions; and the practice of other industry participants was to sell the integrated product at a single price. See ILC, 448 F. Supp. at 232-34. In contrast, plaintiffs contend, operating systems and browsers are not used in fixed proportions. Despite the D.C. Circuit's assumption to the contrary, see Microsoft, 147 F.3d at 948, plaintiffs contend that some users prefer to use as many as three separate browsers while others prefer none at all. Furthermore, plaintiffs argue, not all sellers bundle the products together; no consumer savings have been shown to result from the bundling; and not even Microsoft claims that the benefits of bundling Windows and IE are "dramatic."

In short, this Court is not convinced that either the IBM cases or Foremost Pro Color dictate that Microsoft's licensing practices should be evaluated by a more lenient standard than the one articulated by the Supreme Court in Jefferson Parish and Eastman Kodak, simply because the case involves "physically integrated products or questions of product design," as Microsoft puts it.[14] Despite the Court's misgivings, however, the D.C. Circuit clearly appears to have adopted Microsoft's proposed "technological tying" standard in reversing this Court's Order preliminarily enjoining Microsoft from requiring OEMs to take IE as a condition of licensing Windows 95. See United States v. Microsoft Corp., 147 F.3d 935 (D.C. Cir. 1998) ("Microsoft"), rev'g United States v. Microsoft Corp., 980 F. Supp. 537 (D.D.C. 1997). While that decision was ostensibly limited to interpreting specific terms of the Consent Decree, see Microsoft, 147 F.3d at 950 n.14, the analysis was, in the Court of Appeals' eyes, "consistent with tying law." Id. at 950.

In cases challenging technical integrations, the Court of Appeals wrote, the ultimate issue is whether the "integrated design offers benefits when compared to a purchaser's combination of corresponding stand-alone functionalities." Id. at 949. Noting what it views as the "limited competence of courts to evaluate high-tech product designs and the high cost of error" in making

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[14] In fact, in Jefferson Parish, the Supreme Court implicitly rejected Microsoft's argument that the Court's analysis was limited to integrated packages of *services*. See Jefferson Parish, 466 U.S. at 19 n.30 ("We have often found arrangements involving functionally linked *products* at least one of which is useless without the other to be prohibited tying devices.") (emphasis supplied) (citing, e.g., Mercoid Corp. v. Mid-Continent Co., 320 U.S. 661 (1944) (heating system and stoker switch); Morton Salt Co. v. Suppiger Co., 314 U.S. 488 (1942) (salt machine and salt); Leitch Mfg. Co. v. Barber Co., 302 U.S. 458 (1938) (process patent and material used in the patented process); International Business Machines Corp. v. United States, 298 U.S. 131 (1936) (computer and computer punch cards); Carbice Corp. v. American Patents Corp., 283 U.S. 27 (1931) (ice cream transportation package and coolant); FTC v. Sinclair Refining Co., 261 U.S. 463 (1923) (gasoline and underground tanks and pumps); United Shoe Mach. Co. v. United States, 258 U.S. 451 (1921) (shoe machinery and supplies, maintenance, and peripheral machinery), United States v. Jerrold Electronics Corp., 187 F. Supp. 545, 558-60 (E.D. Pa. 1960) (components of television antennas), aff'd, 365 U.S. 567 (1961) (per curiam)).

such evaluations, the Court of Appeals cautioned that courts should be "wary of second-guessing the claimed benefits of a particular design decision." Id. at 950 n.13. Courts should reject any challenge to an integrated product design, the court opined, if there is "a plausible claim" that the integration "brings some advantage." Id. at 950.

The Court of Appeals went on to articulate a framework for determining whether an integration amounts to a single product for purposes of evaluating a tying claim. "[I]ntegration may be considered genuine if it is beneficial when compared to a purchaser combination." Id. at 949. And "in making this inquiry," a court should not "embark on [a] product design assessment," id., but rather, "[a] court's evaluation of a claim of integration must be narrow and deferential." Id. at 949-50. An integrated product should pass muster if there are "facially plausible benefits to its integrated design." Id. at 950. The court noted, however, that manufacturers should not be permitted "to metaphorically 'bolt' two products together," i.e., place two separate products in a single package "for an anticompetitive purpose (or for no purpose at all)." Id. at 949 & n.12; see also X Phillip E. Areeda et al., Antitrust Law ¶ 1746b, at 227 (1996) ("The main test is whether the items operate better when bundled by the defendant than when linked by the end user.").

The Court of Appeals expressed its "tentative" view, id. at 953, that the Windows 95/IE combination amounted to a "genuine" integration, but expressly left to a more fully developed factual record the final determination of whether Microsoft's claims of "technological benefits" could be substantiated. Id. at 951 n.15, 952. Because numerous issues of material fact remain in dispute as the record presently stands, the Court will deny Microsoft's motion for summary judgment on the tying claims.

Microsoft argues that the Windows/IE integration offers users a myriad of benefits. It asserts, for example, that the integrated design allows users to move "seamlessly" from a Web site to a floppy disk to a CD-ROM to a local area network with a single mouse click, thus making computers easier for consumers to use. But plaintiffs contend that "a comparable browsing experience can be achieved by the combination of Windows 98 and a competing browser." Sibley Decl. ¶ 35.

Microsoft also claims that "IE technologies" in Windows not only permit access to the Internet, but also provide numerous "system services" that are "not directly related to Web browsing" that "enhanc[e] the functionality of a wide variety of applications." See Microsoft, 147 F.3d at 951. Because that functionality resides on the operating system, ISVs are freed from the need to develop and include it as part of their products. In response, plaintiffs contend that "the ability to browse the web using IE can be removed and replaced with a competing browser in such a way that the consistency of the Windows platform for ISVs would not be frustrated in any appreciable manner." Sibley Decl. ¶ 34.

Microsoft also asserts that IE technologies perform numerous functions in Windows that are totally "unrelated to Web browsing." Microsoft, 147 F.3d at 951. For example, IE technologies supply a new user interface in Windows that adopts the navigational paradigms of the Web, including "back" and "forward" buttons, lists of "favorite" sources of information and a "history" of recently-accessed information. Microsoft also claims that IE technologies are essential to the Windows 98 "Help" system, which requires an HTML "interpreter" to display the content of "Help" files and to provide easy user access from "Help" to updated on-line resources. Furthermore, Microsoft asserts, IE technologies in Windows 98: (1) provide support for multiple video monitors; (2) invoke a "Disk Cleanup Wizard" to free up hard disk space by deleting unnecessary files; and (3) invoke a Windows Update feature that permits users to download Windows updates from a Microsoft Web site. Whether or not those functions actually rely on technology provided by the browser, and whether they could be just as efficiently provided by a competing browser, is unclear on the record as it presently stands.

In any event, whether or not the "integration brings benefits does not," the Court of Appeals made clear, "end the inquiry." Microsoft, 147 F.3d at 951. "It is also necessary that there be some reason Microsoft, rather than the OEMs or end users, must bring the functionalities together." Id. (citing X Phillip E. Areeda et al., Antitrust Law ¶ 1746b, at 227; ¶ 1747, at 229 (1996)). Without the benefit of a factual record that this Court had expected the special master to develop, the D.C. Circuit expressed its preliminary belief that "if Microsoft presented [OEMs] with an operating system and a stand-alone browser application, rather than with the interpenetrating design of Windows 95 and IE 4, the OEMs could *not* combine them in the way in which Microsoft has integrated IE 4 into Windows 95." Microsoft, 147 F.3d at 952 (emphasis supplied). That conclusion applies even more forcefully to Windows 98, Microsoft argues, where IE technologies are even more deeply integrated into the OS. Whether it is so remains to be seen.

Plaintiffs disagree. While they concede that IE provides "a small number of Internet-oriented updates that are not available through the installation of Internet Explorer, as distributed separately from the operating system," see Mem. of the U.S. in Supp. of Mot. for Prelim. Inj. at 43 n.41, plaintiffs nevertheless contend that "the browsing functionality in Windows 98 is almost entirely equivalent to that provided when Internet Explorer 4.01 is installed on top of Windows 95." Id. (citing C. Jones (Microsoft) Dep. at 34:2-8).

To summarize, the Court cannot determine whether Windows and IE are "separate products" until it becomes clear what are the synergistic benefits that are *unique* to the Windows/IE combination, i.e., benefits that could not be obtained by combining another browser with Windows. Moreover, it is unclear exactly how the integration is more beneficial when compared to a combination effected by an OEM or an ultimate consumer. Finally, the Court must determine whether Microsoft "metaphorically 'bolt[ed]' two products together," "for an anticompetitive purpose (or for no purpose at all)." See Microsoft, 147 F.3d at 949 & n.12. Plaintiffs cite Microsoft documents describing the bundling as motivated by a desire to thwart browser competition and to "weld" the products together to achieve that goal. See, e.g., B. Veghte 2/8/97 e-mail (SJ Opp'n Ex. 19).

To succeed on their tying claims, however, plaintiffs must do more than prove that Windows and IE are separate products. They must also show that Windows (the alleged tying product) is conditioned on the purchase of IE, and that the conditioning affects a "substantial volume of commerce" in the browser market. See Eastman Kodak, 504 U.S. at 462; Foster, 590 F.2d at 931. Microsoft contends that neither of those elements can be proved.

In order to prove the requisite "conditioning," plaintiffs must prove that licensees "might have preferred" not to license a browser, or to license it "elsewhere on different terms," Jefferson Parish, 466 U.S. at 12, and that Microsoft "coerces the abdication of [licensees'] independent judgment" as to the relative merits of competing browsers. See Times-Picayune Publ'g Co. v. United States, 345 U.S. 594, 605 (1953); see also Service & Training, Inc. v. Data Gen. Corp., 963 F.2d 680, 684 (4th Cir. 1992) ("The purpose of the inquiry into consumer demand is to determine whether there are customers who would, absent an illegal agreement, purchase the tied product without the tying product, and the tying product without the tied product."). Plaintiffs allege that Microsoft's goal was to "*make* people use IE instead of Navigator" by "leverag[ing] the [operating system]." See C. Wildfeuer 2/24/97 e-mail (emphasis supplied) (PI Ex. 23).

Microsoft argues that plaintiffs cannot satisfy the "conditioning" requirement of the tying test, because no OEM has been forced to *purchase* a separate product; IE technologies are included in a *single royalty* paid by OEMs for Windows 98. But as Professor Areeda has pointed out, "the tie may be obvious, as in the classic form, or somewhat more subtle, as when a machine is sold or leased at a price that covers 'free' servicing." See IIIA Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 760b6, at 51 (1996). Whether Microsoft invoices OEMs separately for Windows and IE or collects a single royalty of the same amount, it compels OEMs to take (and, one way or the other, to pay for) the entire package of software.

Microsoft also disputes plaintiffs' claims that the Windows/IE combination affects a not insubstantial amount of commerce in the browser market. It argues that neither the design of Windows 98 nor the Windows licensing agreements appreciably impacts Netscape's ability to distribute its browser. OEMs are free to preinstall Netscape Navigator as an add-on (so long as they do not disturb IE) and several leading OEMs apparently do so.

But plaintiffs maintain that while OEMs may preinstall Netscape's browser (leaving IE itself in place, with no other icons or folders larger than IE's), the reality is that many OEMs hesitate to do so, mainly because they believe that too many icons and layers cause customer confusion, which could increase product support costs. OEMs bear the burden of providing technical support for the software they preinstall, a fact that creates a disincentive for preinstalling duplicative titles in a single product category. Furthermore, preinstalling two browsers would double the necessary product testing for OEMs. In fact, Microsoft has actually cited these factors itself to dissuade some OEMs from loading a second browser on their computers. See J. Kempin 10/2/97 Dep. at 37. And Joachim Kempin, Microsoft's Senior Vice President of OEM Sales, agrees that OEMs "should be" concerned about installing two browsers on their machines. See id. at 31.

The volume of foreclosed commerce necessary to satisfy the tying standard need only be "substantial enough in terms of dollar-volume so as not to be merely de minimis." Fortner Enters., Inc. v. United States Steel Corp., 394 U.S. 495, 501 (1969) ($190,000 not an insubstantial amount, even though only a very small percentage of the market); see also Digidyne Corp. v. Data General Corp., 734 F.2d 1336, 1341, 1347 (9th Cir. 1984) (citing Fortner). While plaintiffs do not cite a dollar value or a percentage of the market that is allegedly foreclosed, the facts are sufficiently in dispute to at least raise a genuine issue for trial. Furthermore, where, as here, products in the tied product market (browsers) are potential "partial substitutes" for the tying product, antitrust concerns are heightened because tying agreements not only reduce competition in the tied market, but also reinforce market power in the tying market. See X Phillip E. Areeda et al., Antitrust Law ¶ 1747 a-c, at 230-33 (1996); see also Grappone, Inc. v. Subaru of New England, Inc., 858 F.2d 792, 795 (1st Cir. 1988).

IV.

As Microsoft recognizes in its own internal communications, consumers are likely to select whatever Internet services (including browsers and IAPs) they see the first time they turn on their

PC, see, e.g., M. Dunie 2/24/97 e-mail ("[O]nce everything is in the OS and right there, integrated into the OS . . . there would be no more need to use something 'separate.'") (States' PI Ex. 1), and are unlikely to go through the trouble of switching. See, e.g., B. Chase 4/4/96 Planning Memo ("We know that it is very hard and expensive to make people switch") (States' PI Ex. 2).

Plaintiffs allege that, in addition to "tying" IE to Windows, Microsoft sought to control the OEM channel of browser distribution by restricting OEMs' ability to alter the Windows "boot-up" sequence.[15] After the machine boots up, the user sees a default or "first" screen. The boot-up and first screen present a convenient opportunity for vendors of software and services to address potential customers, providing them with information about and access to their products, and for OEMs to communicate with their customers about configuration options.

When Windows 95 was first released, a number of OEMs who preinstalled Windows 95 customized the content and configurations of the computers' boot-up and first screens for various commercial reasons. Some OEMs altered the arrangement, number and content of icons and folders which accessed IAPs, Internet browsers and other software through the Windows 95 desktop. These OEMs struck deals with IAPs and ICPs that earned revenue for OEMs and garnered customers for the IAPs and ICPs. In an internal e-mail, Bill Gates wrote of his concern that OEMs were bundling non-Microsoft browsers and "coming up with offerings together with Internet Service providers that get displayed on their machines in a FAR more prominent way than . . . our Internet browser" and that those offerings were interfering with the "very very

[15] The "boot-up" sequence is the installation and configuration routine a PC goes through when a user turns it on.

important goal" of "[w]inning Internet browser share." B. Gates 1/5/96 e-mail (PI Ex. 45) (emphasis in original).

Allegedly to address this concern, Microsoft, as a condition of licensing Windows 98, began prohibiting OEMs from adding to the sequence of screens every user sees in the boot-up sequence and from modifying the first screen displayed to the user at the conclusion of the boot-up sequence.[16] OEMs could not remove folders or icons from the Windows desktop, create icons or folders larger than those placed by Microsoft on the desktop, and could not alter the boot-up sequence by, for instance, presenting an OEM-created screen that would highlight a choice of Internet browsers or the OEM's own Internet offerings. Plaintiffs contend that the boot and start-up screen restrictions amount to an unreasonable restraint of trade in violation of § 1.

The restrictions are subject to a "rule of reason" analysis, and are unlawful only if they injure competition by restricting competitors' output more than they further Microsoft's legitimate objectives, see, e.g., National Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 691 (1978); American Ad Management, Inc. v. GTE Corp., 92 F.3d 781, 791 (9th Cir. 1996), or if Microsoft's objectives could be achieved by a less restrictive means, see Sullivan v. NFL, 34 F.3d 1091, 1103 (1st Cir. 1994).

Microsoft argues that its OEM license agreements merely highlight and expressly state the rights that Microsoft already enjoys under federal copyright law. Consequently, it contends, the agreements are not subject to challenge under the antitrust laws. According to Microsoft, the license agreements merely require that the very first time a consumer turns on his new computer,

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[16] Several OEMs, including Micron, Hewlett Packard, and Gateway, have requested that Microsoft allow them to provide new PC purchasers with an alternative boot-up sequence or first screen, but Microsoft has refused.

Microsoft's copyrighted operating system be allowed to go through its initial startup sequence as designed, developed and tested by Microsoft and to display the Windows "desktop" screen without any aspects of that screen having been altered by the OEM.

Microsoft argues that it "may refrain from vending or licensing and content [itself] with simply exercising the right to exclude others from using [its intellectual] property." See Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932). But whatever copyright protection Microsoft enjoys in its software is not unlimited. For example, copyright in a computer program does not extend to its functional aspects. See, e.g., Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807 (1st Cir. 1995), aff'd by an equally divided Court, 516 U.S. 233 (1996). It does not preclude design choices dictated by necessity, cost, convenience or consumer demand. See, e.g., Apple Computer, Inc. v. Microsoft Corp., 35 F.3d 1435, 1442 (9th Cir. 1994) (user interface of computer program entitled to only limited protection against "virtually identical" copying, because of license and because of limited number of different ways the underlying idea can be expressed); Computer Assocs. Int'l v. Altai, 982 F.2d 693, 715 (2d Cir. 1992) (significant portions of structure, sequence, and organization of program may be copied in order to write similar program to run on different platform). And it does not render inviolate portions of the program that are not original to its creator. See Stenograph L.L.C. v. Bossard Assocs., Inc., 144 F.3d 96, 99 (D.C. Cir. 1998).

Furthermore, copyright law does not give Microsoft blanket authority to license (or refuse to license) its intellectual property as it sees fit. A copyright does not give its holder immunity from laws of general applicability, including the antitrust laws. See Data General Corp. v. Grumman Sys. Supp. Corp., 36 F.3d 1147, 1185 n.63 (1st Cir. 1994) ("It is in any event well settled that concerted and contractual behavior that threatens competition is not immune from antitrust inquiry simply because it involves the exercise of copyright privileges."). Copyright holders are restricted in their ability to extend their control to other markets. See Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 479 n.29 (1992) ("The Court has held many times that power gained through some natural and legal advantage such as a patent, copyright, or business acumen can give rise to liability if a seller exploits his dominant position in one market to expand his empire into the next.") (internal citation and quotation marks omitted). They may not prevent the development and use of interoperable programs by competitors. See, e.g., DSC Communications Corp. v. DGI Techs. Inc., 81 F.3d 597, 601 (5th Cir. 1996) (likely copyright misuse to use copyright in a computer program operating a telephone switch to prevent a competitor from designing and testing a compatible switch using copyright holder's protocol). Antitrust liability may also attach to other anticompetitive licensing restrictions involving copyrighted works. See, e.g., Practice Management Info. Corp. v. American Med. Ass'n, 121 F.3d 516, 520-21 (9th Cir. 1997) (finding copyright misuse where copyright owner entered into license agreements restricting licensees from competing with it), amended by, 133 F.3d 1140 (9th Cir.), cert. denied, 118 S. Ct. 2367 (1998); Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970 (4th Cir. 1990) (same).

In addition to claiming a right to "exclude" licensees as it sees fit, Microsoft cites the Second Circuit's opinion in Gilliam v. ABC, 538 F.2d 14 (2d Cir. 1976), recognizing a copyright holder's "moral right of integrity" where a copyrighted work was significantly changed, or "mutilated," but still promoted under its original name. But the Gilliam court acknowledged the lack of statutory or doctrinal support in copyright law for the right it recognized, see Gilliam, 538

F.2d at 24 , and ultimately grounded its decision in trademark law. Id. at 24-25. Several subsequent decisions considering Gilliam have declined to endorse the "moral right"argument Microsoft advances. See, e.g., Halicki v. United Artists Communications, Inc., 812 F.2d 1213, 1214 (9th Cir. 1987); Weinstein v. University of Illinois, 811 F.2d 1091, 1095 n.3 (7th Cir. 1987); Paramount Pictures Corp. v. Video Broad. Sys, Inc., 724 F. Supp. 808, 820 (D. Kan. 1989).

Moreover, whatever policy justifications that may exist for a moral right of integrity in works of art are substantially weaker when the work at issue is a computer program, whose value lies in its functionality, not its artistry. The Copyright Act itself expressly allows owners of a copy of a computer program to "adapt" it in certain circumstances without the copyright owner's permission. See 17 U.S.C. § 117; see also Aymes v. Bonelli, 47 F.3d 23 (2d Cir. 1995). Although Microsoft undoubtedly enjoys some "right against mutilation" in its software, there are significant factual questions in dispute on this issue, chief among them the extent of copyright protection in the *specific* portions of the software plaintiffs seek to modify.

Microsoft also claims that the boot and start-up screen restrictions are justified by legitimate business reasons, each of which is disputed by plaintiffs. For example, the restrictions purportedly ensure a "stable and consistent platform" for ISVs, who must know that the software code that provides required system services ("APIs") will be present on every computer. In response, plaintiffs contend that the necessary APIs would be unaffected by alterations to the Windows boot-up sequence, modifications to the contents of desktop folders, or creation of icons of different shapes and sizes.

Microsoft also insists that the restrictions are necessary to ensure a "consistent user experience across multiple brands of computers." But plaintiffs point out that Microsoft permits

OEM modifications that do not affect the browser, even though such modifications may result in an "inconsistent user experience." For example, Microsoft grants exceptions to the screen restrictions for some OEM tutorials and "system check" applications. See J. Kempin (Microsoft) 3/18/98 Dep., 58:24 - 59:25. It permits some OEMs to display their own ISP sign-up software before the Windows 98 boot-process is completed for the first time, and permits OEMs to preload the software of their choice, subject to Microsoft's license restrictions. *Removal* by OEMs of the IE icon would not, plaintiffs argue, affect the overall "look and feel" of Windows any more than *adding* various software (which Microsoft permits). Similarly, the "look and feel" would not be affected by permitting OEMs to install icons of different sizes, plaintiffs contend.

Finally, Microsoft claims that the restrictions are necessary to "preserve Microsoft's reputation as a supplier of quality operating system software and enhance[] the value of Microsoft's brand name." See Gilliam, 538 F.2d at 18-19 (reputational injury resulting from unauthorized alteration of copyrighted work is irreparable). But plaintiffs argue that this "quality control" defense is implausible. Microsoft requires OEMs to bear the cost of providing post-sale software support for the computers they sell. Accordingly, OEMs are unlikely to take any action that will do anything to increase the likelihood that customers will call them for technical assistance.

Regardless of the viability of its justifications for the agreements, Microsoft contends that there is no antitrust violation because there is no market foreclosure. OEMs are free to configure the computers so that on all *subsequent* occasions (after the initial boot) they will boot directly into an alternative "shell" (such as Netscape Communicator). But several OEMs (and Microsoft executives) have expressed their belief that, while the licenses technically allow OEMs to engineer a mechanism for "user-initiated" action after the first boot-up is complete to alter the Microsoft-required screens, these factors are of negligible value to OEMs. It is both costly and time-consuming for OEMs to develop such a mechanism, plaintiffs contend. See B. Chase (Microsoft) 3/1/96 e-mail ("most OEMs won't go through the hassle to develop such a DOS utility") (PI Ex. 43); J. Kempin (Microsoft) 3/18/98 Dep., 62:2 - 63:10; R. Brownrigg (Gateway 2000) Dep., 49:15 - 51:2; F. Santos (Hewlett-Packard) Dep., 29:11 - 30:15.

Numerous issues remain genuinely in dispute on the boot and start-up screen claim. These include the extent of copyright protection in the *specific* portions of software plaintiffs seek to modify and whether Microsoft abused its copyright for anticompetitive purposes. Plaintiffs also contest the legitimacy of Microsoft's claimed business justifications and Microsoft's claims that the restrictions do not foreclose competitors' opportunities.

V.

Since May 1995, plaintiffs allege, Microsoft has substantially foreclosed non-Microsoft browsers from the IAP and ICP distribution channels by relying on its operating system monopoly to coerce IAPs and ICPs into entering into what amount to "exclusive dealing" arrangements. Plaintiffs claim that, in return for placement on Microsoft's coveted Windows desktop (the content of which Microsoft controls by virtue of the boot and start-up screen restrictions), providers reluctantly agreed to distribute and promote IE and *not* to distribute and/or promote competitive browsers.

For example, plaintiffs assert, Microsoft reached agreements with the largest OLSs, including America Online, CompuServe, and Prodigy, by which Microsoft undertook to include an icon for the OLSs' client software both in the "Online Services" folder[17] that is displayed on the Windows desktop, and in the Windows "Start" menu. Pursuant to the agreements, Microsoft must also invest in the support and development of improved versions of the OLSs' client software. In return, the OLSs agree to: (1) distribute and promote IE to their subscribers as the "exclusive" or "primary" browser, and not to distribute a non-Microsoft browser unless a customer specifically requests it; (2) eliminate links on their Web sites from which their subscribers could download a competing browser; (3) refrain from "expressing or implying" to their subscribers that a competing browser is available (and even from displaying a logo for a non-Microsoft browser on the OLS's home page or elsewhere); (4) limit the percentage of competing browsers they distribute to 15%, even in response to specific requests from customers; and (5) design their Web sites using Microsoft-specific, proprietary programming extensions so that those sites look better when viewed with IE than when viewed through a competing browser.

A number of ISPs agreed to similar terms in return for Microsoft's agreement to include them in a list of providers that are shown to an end-user who selects his Internet access provider using a Windows 98 feature called the Internet Connection Wizard ("ICW"). When a user elects to use the ICW, Windows dials into a computer maintained by Microsoft that transmits to the user a list of participating ISPs. If the user decides to sign up for an ISP's service, Windows connects him to a computer maintained by that ISP, and the user's computer is automatically configured to work properly with the Internet connection provided by that ISP. In return, ISPs pay Microsoft a

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[17] This folder contains the icons of the various providers. When the user "double-clicks" the icon, he is connected to the provider and permitted to "sign up" for the provider's service.

referral fee for each customer referred to them through the ICW and agree to terms similar to those in the OLS agreements.

The third group of providers entering into such agreements with Microsoft were ICPs. One of IE 4.0's new features is the provision of “channels” that appear on the right side of the Windows desktop screen after IE 4.0 is installed. Channel buttons are icons on the Windows desktop screen that, when clicked, lead the user directly to a particular content provider's Web site or service,[18] without having to sign on to the Internet through some intermediary step. In order to gain prominent “channel placement,” certain ICPs agreed: (1) not to compensate the manufacturer of an “other browser”[19] (including by distributing its browser) for the distribution, marketing, or promotion of the ICP's content; (2) not to promote any browser produced by any manufacturer of an “other browser”; (3) not to allow any manufacturer of an “other browser” to promote and highlight the ICP's channel content on or for its browsers; and (4) to design its Web sites using Microsoft-specific, proprietary programming extensions so that those sites look better when viewed with IE than when viewed through a competing browser.

Plaintiffs contend that providers sometimes agreed to Microsoft’s terms despite their preference not to be locked into exclusive browser distribution agreements. CompuServe, the nation's second-largest OLS, for example, expressed its preference “to have flexibility in software” that it distributes. <u>See</u> K. Knott Dep. at 25:4-5. An MCI executive testified that his company would have liked to “have had the flexibility to be able to promote other browsers

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[18] Examples include The Disney Channel and a channel, developed by Intuit, providing financial software and services.

[19] For purposes of the ICP agreements, “other browsers” include the top two browsers (exclusive of IE) by browser share.

should there be a marketing advantage to do so." See S. Von Rump (MCI) Dep. at 11:15-17. And AT&T told Microsoft that it wanted to remain "browser neutral," and that the "level of exclusivity" demanded by Microsoft was problematic for AT&T's partnership with Netscape. See D. Steele (Microsoft) 3/14/96 e-mail (PI Ex. 58); B. Silverberg Dep., 170:21 - 171:5. Nevertheless, plaintiffs contend, these providers acceded to Microsoft's restrictions in order to gain access to the nearly ubiquitous Windows desktop. For example, Microsoft allegedly told AT&T during negotiations: "You want to be part of the Windows box, you're going to have to do something special for us . . . If you want that preferential treatment from us . . . we're going to want something very extraordinary from you." See B. Silverberg Dep. at 159:10-16.

Exclusive dealing arrangements pose two related, but distinct antitrust concerns. First, they threaten to eliminate opportunities for products unable to find ample other outlets to the marketplace. Second, they raise the barriers to entry in a market because, in order to enter, producers will have to be vertically integrated (i.e., they will have to operate at both the manufacturing and retailing levels).

Recognizing potentially pro-competitive rationales for such agreements, see, e.g., Omega Envtl., Inc. v. Gilbarco, Inc., 127 F.3d 1157, 1162 (9th Cir.1997) ("well-recognized economic benefits to exclusive dealing arrangements"), petition for cert. filed, 66 U.S.L.W. 3750 (U.S. May 11, 1998) (No. 97-1828), courts are obliged to apply a "rule of reason" analysis. See, e.g., Roland Mach. Co. v. Dresser Indus., 749 F.2d 380, 393 (7th Cir. 1984) (rule of reason must be applied to exclusive dealing). As a threshold matter, courts generally determine whether a "substantial share of the relevant market" is foreclosed. See Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 328-29 (1961). Once foreclosure of a sufficient percentage is found, courts consider the agreements' *actual* impact on competition (as opposed to merely the foreclosed market share), see Tampa Elec., 365 U.S. 320; see also Collins v. Associated Pathologists, Ltd., 844 F.2d 473, 478-79 (7th Cir. 1988); Interface Group v. Massachusetts Port Auth., 816 F.2d 9, 11-12 (1st Cir. 1987), and any procompetitive justifications that may outweigh anticompetitive effects.

In considering the degree of foreclosure, it is important to remember that the relevant figure is the share of the browser market that is *foreclosed* by the challenged agreements, and *not* Microsoft's total browser share. Plaintiffs do not need to show that Microsoft's competitors are *completely* excluded from the marketplace. Cf. Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585 (1985) (competitor never contended that the joint marketing program at issue was essential to its survival, but rather that it impeded its marketing efforts). Nevertheless, plaintiffs must establish foreclosure on the order of greater than 40% to prevail on their exclusive dealing claims. See, e.g., United States v. Dairymen, Inc., 758 F.2d 654 (6th Cir. 1985) (unpublished) (50% sufficient); Sewell Plastics, Inc. v. Coca-Cola Co., 720 F. Supp. 1196, 1212-14 (W.D.N.C. 1989) (40% insufficient); Oltz v. St. Peter's Community Hosp., 656 F. Supp. 760 (D. Mont. 1987) (84% sufficient). Plaintiffs must also establish the extent to which exclusive dealing contracts are imposed on *other* resellers in the market. See Chuck's Feed & Seed Co., Inc. v. Ralston Purina Co., 810 F.2d 1289, 1295 (4th Cir. 1987) (j.n.o.v. for defendant where plaintiff failed to show extent to which exclusive dealing was used in the market as a whole).

Without citing a specific percentage of the market that is allegedly foreclosed, plaintiffs allege that Microsoft has entered into agreements with the "largest and most important" ISPs and OLSs and the "largest and most popular" ICPs. The OLSs in Microsoft's Online Services folder include America Online, CompuServe, Prodigy, AT&T WorldNet and Microsoft Network, which, according to plaintiffs, collectively account for over 53% of the total North American subscriber base for Internet access. See Microsoft 1/23/98 Internet Customer Unit FY '98 Mid-Year Review (SJ Opp'n Ex. 26). In 1997, Microsoft estimated that 43% of home users access the Internet through AOL alone. See Microsoft April 1997 IE Market Review (PI Ex. 54). And one Microsoft executive has estimated Internet Explorer's share of usage among AOL subscribers as 92%. See C. Myhrvold 1/13/98 e-mail (SJ Opp'n Ex. 80).

Plaintiffs contend that Microsoft's conduct, *in the aggregate*, see Continental Ore Co. v. Union Carbide & Carbon Corp., 370 U.S. 690, 699 (1962) (courts should consider cumulative effects in assessing likelihood of anticompetitive harm); City of Anaheim v. Southern Cal. Edison Co., 955 F.2d 1373, 1376 (9th Cir. 1992), is substantially likely to entrench Microsoft's operating system monopoly and harm competition. Most importantly, plaintiffs allege, Netscape is foreclosed from the "vast majority" of IAPs, which are the single most important channel through which users acquire their browsers.[20]

Microsoft contends that Netscape and other competitors are *not* foreclosed from the marketplace, and that the availability to Netscape and others of alternative channels of distribution, including the possibility of direct sales to end users, by itself is fatal to an exclusive dealing claim. See, e.g., Omega Envtl., 127 F.3d at 1162-63; Seagood Trading Corp. v. Jerrico, Inc., 924 F.2d 1555, 1573 (11th Cir. 1991); Stitt Spark Plug Co. v. Champion Spark Plug Co., 840 F.2d 1253, 1258 (5th Cir. 1988). Microsoft claims that Netscape has arrangements with

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[20] In September 1996, Microsoft executive Brad Chase estimated that at least 31% of Internet users get their browsers from an IAP. See B. Chase 9/9/96 e-mail.

thousands of ISPs and ICPs, who include “Netscape Now” buttons on their Web sites that facilitate the electronic downloading of Navigator. Netscape also apparently has arrangements with leading ISVs such as Corel, IBM, Novell, Oracle and Sun, and various OEMs who pre-install Navigator on their computers. Netscape executives testified that the company, through these and other channels, will distribute between 150 and 170 million copies of its browser this year alone.

But Netscape’s CEO also testified that the ISP channel is one of the principal means through which Netscape has historically distributed its browser, and that other methods of distribution cannot make up for the lack of access to the ISP and OEM channels. Netscape’s principal remaining channel for distributing its browser is to permit users to download it from a Netscape Web site, but Microsoft itself recognizes the decreasing viability of browser distribution through downloads, as browsers increase in complexity and size, resulting in inordinately long download times and a high rate of failure. See Myhrvold Dep., 152:19 - 153:4; J. Belfiore Dep. at 45:2-16; B. Chase 11/19/97 e-mail (PI Ex. 73). Microsoft’s Carl Stork, who oversaw the development of Windows 95 and Windows 98, testified that having a browser preinstalled on a PC when a user buys it avoids the “painstaking” process of downloading, which is “fraught with risk,” and reduces support calls and the potential for errors. See Stork Dep. at 42-43.

In addition to disputing the percentage of the market that may be foreclosed by the agreements in question, the parties disagree about numerous other factors courts consider in determining whether competition in the relevant market is actually affected. Microsoft argues that, since the OLS arrangements are short-term, they cannot unreasonably restrain trade. See, e.g., Omega Envtl., 127 F.3d at 1163-64.[21] Excluding the agreement with AOL, which expires on January 1, 2001, all of Microsoft's OLS agreements expire either this year or next. See Twin City Sportservice, Inc. v. Charles O. Finley & Co., Inc., 676 F.2d 1291 (9th Cir. 1982) (condemning contracts in excess of ten years); Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 236-38 (1st Cir. 1983) (approving two-year contracts); Roland Mach., 749 F.2d at 394-95 (approving agreements that could be terminated on one year notice). This factor may be appropriate to consider in a final determination of whether the agreements unreasonably restrain trade. It is, however, only one among many factors the Court will consider and does not admit of, much less compel summary judgment for Microsoft on this claim.

Microsoft also argues that the limitations on OLSs are justified to prevent "free-riding" by other browser manufacturers on Microsoft's investment in support for the development of improved versions of OLSs' software the agreements commit it to undertake. See generally Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 55 (1977) (preventing free riding may justify certain vertical restraints); see also American Motor Inns, Inc. v. Holiday Inns, Inc., 521 F.2d 1230, 1252 (3d Cir. 1975) (hotel chain's exclusionary agreements with franchisees justified, in part, by chain's desire to strengthen its position vis-a-vis its competitors); Joyce Beverages v. Royal Crown Cola Co., 555 F. Supp. 271, 278 (S.D.N.Y. 1983) (recognizing exclusive dealing as

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[21] Microsoft also argues that since it has unilaterally waived the challenged provisions of its ISP and ICP agreements, the claims related to those agreements are moot. But the Court retains jurisdiction to consider even the "waived" practices if they caused anticompetitive effects. See Northwest Envtl. Defense Ctr. v. Gordon, 849 F.2d 1241, 1245 (9th Cir. 1988) ("The fact that the alleged violation has itself ceased is not sufficient to render a case moot. As long as effective relief may still be available to counteract the effects of the violation, the controversy remains live and present."). "[V]oluntary cessation of allegedly illegal conduct" does "not make the case moot." United States v. W.T. Grant Co., 345 U.S. 629, 632 (1953). Where the "defendant is free to return to his old ways," id., it must demonstrate that it is "absolutely clear" that "the allegedly wrongful behavior could not reasonably be expected to recur." Vitek v. Jones, 445 U.S. 480, 487 (1980) (internal citation and quotation marks omitted). Microsoft has not made such a showing.

a means of assuring that retailer "devotes undivided loyalty to its particular brand and that it competes vigorously against all competing brands."). But "[w]hen payment is possible, free-riding is not a problem because the 'ride' is not free." Chicago Prof'l Sports, Ltd. Partnership v. NBA, 961 F.2d 667, 675 (7th Cir. 1992) (Easterbrook, J.). In other words, in order to recoup its investment, Microsoft could simply charge OLSs a fee rather than extract exclusionary rights.

Microsoft views its ISP agreements as nothing more than "commonplace cross-marketing arrangements." See Chuck's Feed & Seed, 810 F.2d at 1295 (considering extent to which exclusive dealing was used in the market as a whole). For example, Netscape has similar agreements with all five of the regional Bell operating companies ("RBOCs"), providing that Navigator must be the default browser for all customers who do not specifically request an alternative. But plaintiffs point out that the Netscape restrictions will automatically terminate in the event that Microsoft's restrictions on AT&T and MCI are eliminated. See Solnik Dep. at 79:2-22; Beran Dep. at 49-52; Barksdale Dep. at 220-21. Moreover, those agreements (unlike Microsoft's) do not require that the RBOCs ship Navigator as a certain minimum percentage of their browsers. And the ISPs in Microsoft's Internet referral server have a combined base of over 4.3 million subscribers, compared to the 625,000 subscribers to the RBOCs. See Microsoft 1/28/98 ISP Marketing Update (SJ Opp'n Ex. 25).

Microsoft also points out that its ISP agreements involve only eleven of the more than 4,500 ISPs in the United States and, once again, are short term, typically no longer than one or two years. Moreover, Microsoft points out, the customers of the eleven ISPs appear to be using Netscape's Web browsing software and IE in about the same proportion as Internet users generally. While that may be true, Microsoft's own documents, see Microsoft 1/26/98 Referral

Server Business Plan (SJ Opp'n Ex. 40), show that IE's share of browser usage is much higher among subscribers to ISPs that have been subject to its agreements since mid-1996 than among subscribers to ISPs that entered into agreements in mid- or late 1997. This supports plaintiffs' argument that the agreements have had a substantial role in increasing Microsoft's browser share.

In summary, the record to date discloses many material issues of fact genuinely in dispute on plaintiffs' exclusive dealing claims. Chief among them is the degree to which the browser market is foreclosed and the actual effect the agreements have had on competition. Also hotly in dispute is whether the arrangements serve legitimate business purposes that might outweigh any anticompetitive effect: Microsoft claims that consumers benefit by easier access to the Internet; ISPs included in its referral server and OLSs in the Online Services folder benefit by opening the door to a new source of customers; and Microsoft itself benefits by receiving referral fees from the providers and promotion of its browser technologies. But see Myhrvold Dep. at 137:6-7. (explaining that the referral server "doesn't even pay for itself, much less generate any profits").

Furthermore, any claimed benefit "cannot outweigh its harm to competition, if a reasonable, less restrictive alternative to the policy exists that would provide the same benefits" as the challenged policies. See Sullivan v. NFL, 34 F.3d 1091, 1103 (1st Cir. 1994). This difficult balancing of potentially legitimate business justifications against what plaintiffs contend are exclusionary effects are fact-bound questions that generally cannot be resolved on summary judgment. See, e.g., Betaseed, Inc. v. U&I, Inc., 681 F.2d 1203, 1228-30 (9th Cir. 1982) (explaining that "the reasonableness of a restrictive practice is a paradigm fact question" and reversing grant of summary judgment for defendant on rule of reason claim).

VI.

Plaintiffs contend that Microsoft has monopoly power in Intel-compatible PC operating systems, the relevant product market in this case, and that its monopoly is reinforced by high barriers to entry and network effects. Plaintiffs also allege that Microsoft has "willfully" maintained that monopoly by engaging in anticompetitive conduct, including the tying[22] and other alleged § 1 violations discussed supra, aimed at eradicating competition in the browser market, which it perceives as a threat to its operating system monopoly. This conduct, plaintiffs contend, lacks any legitimate business justification.

In order to succeed on their claims of illegal monopolization, plaintiffs must prove: (1) Microsoft's possession of monopoly power in a relevant market; and (2) the "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." See United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966). For purposes of summary judgment, Microsoft concedes its possession of monopoly power in the market for Intel-compatible PC operating systems. Accordingly, the Court must deny summary judgment on the monopolization claim if there are disputed facts regarding whether Microsoft has "willfully" maintained its alleged monopoly.

A monopolist's conduct that violates § 1 *necessarily* violates § 2. See United States v. Griffith, 334 U.S. 100, 106 (1948); Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 239 (1st Cir. 1983). Since the Court found sufficient facts to be in dispute to preclude summary

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[22] By using monopoly power to compel a customer to purchase a product it might prefer to purchase elsewhere, a monopolist "forecloses competition on the merits in a product market distinct from the market for the tying item." Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 22 (1984). "[B]y doing so, the [monopolist] may build a strong market position in [the tied product market]; and that position [in the tied product market], in turn, may increase its power" in its monopoly product. Grappone, Inc. v. Subaru of New England, Inc., 858 F.2d 792, 795 (1st Cir. 1988).

judgment for defendant on plaintiffs' § 1 allegations, summary judgment is ipso facto precluded on the monopolization claims. Furthermore, a monopolist's conduct that does not rise to the level of a § 1 violation may nevertheless violate § 2 if it "impair[s] competition in an unnecessarily restrictive way." Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 605 (1985); see also Lorain Journal Co. v. United States, 342 U.S. 143, 149 (1951). As Justice Scalia wrote in Eastman Kodak, "[w]here a defendant maintains substantial market power, his activities are examined through a special lens: Behavior that might otherwise not be of concern to the antitrust laws – or that might even be viewed as procompetitive – can take on exclusionary connotations when practiced by a monopolist." 504 U.S. at 488 (Scalia, J., dissenting); see also Berkey Photo v. Eastman Kodak Co., 603 F.2d 263, 274-75 (2d Cir. 1979). These are quintessential fact questions and are genuinely disputed.

Plaintiffs also contend that Microsoft is unlawfully *attempting* to monopolize the market for Internet browsers. In order to prevail on this claim, plaintiffs must prove that Microsoft: (1) engaged in predatory or anticompetitive behavior (2) with a specific intent to monopolize and, that (3) there is a "dangerous probability" of its achieving monopoly power. See Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 456 (1993); see also International Distribution Ctrs. v. Walsh Trucking Co., 812 F.2d 786, 790 (2d Cir. 1987); William Inglis & Sons Baking Co. v. ITT Continental Baking Co., Inc., 668 F.2d 1014, 1027 (9th Cir. 1981).

The Supreme Court has held that intent to injure or destroy a rival and to expand one's own business are, standing alone, insufficient to produce an antitrust violation. See Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 225 (1993); see also Abcor Corp. v. AM Int'l, Inc., 916 F.2d 924, 927 (4th Cir. 1990); Morgan v. Ponder, 892 F.2d 1355, 1359 (8th Cir. 1989) (statements such as "we'll do whatever it takes" are "often legitimately used by business people in the heat of competition"); Great Escape, Inc. v. Union City Body Co., 791 F.2d 532, 541 (7th Cir. 1986) (because "[a]ll lawful competition aims to defeat and drive out competitors," the "mere intention to exclude competition and to expand one's own business is not sufficient to show a specific intent to monopolize"); Richter Concrete Corp. v. Hilltop Concrete Corp., 691 F.2d 818, 826 (6th Cir. 1982). The intent must be "something more than an intent to compete vigorously." See Spectrum Sports, 506 U.S. at 459.

As Professor Hovenkamp points out, "[i]ntent to 'exclude' is consistent with both efficient practices (research and development) and inefficient ones (predatory pricing)." See Herbert Hovenkamp, Federal Antitrust Policy 252 (1994). Consequently, courts are hesitant to decide cases as a matter of law where the evidence of intent is ambiguous. See, e.g., U.S. Phillips Corp. v. Windmere Corp., 861 F.2d 695, 698-703 (Fed. Cir. 1988) (letting jury decide whether internal memoranda containing statements such as "let's pound [our competitors] into the sand" were simply sales talk or sufficient evidence of anticompetitive intent).

In Spectrum Sports the Supreme Court held that improper intent may be inferred from objective evidence such as predatory conduct. See 506 U.S. at 459 ("Unfair or predatory conduct may be sufficient to prove the necessary intent to monopolize."); see also William Inglis & Sons, 668 F.2d at 1027; United States v. Empire Gas Corp., 537 F.2d 296 (8th Cir. 1976). The same facts that preclude summary judgment on plaintiffs' § 1 allegations, if proven, might be sufficient for the Court to infer an improper intent from that behavior.

Plaintiffs also contend that Microsoft's specific intent to monopolize the browser market can be inferred from its attempt to solicit its major competitor, Netscape, to participate in an illegal market allocation scheme. Cf. United States v. American Airlines, Inc., 743 F.2d 1114, 1121 (5th Cir. 1984) (a solicitation to form a cartel in a concentrated market, even if the solicitation is rejected, can in itself constitute an attempt to monopolize). While Microsoft vigorously disputes plaintiffs' account of the June 21, 1995 meeting with Netscape, plaintiffs' evidence is sufficient to create a genuine dispute. Chris Jones, Microsoft's then Group Manager for Internet Explorer, participated in that meeting. In deposition testimony, Mr. Jones indicated that Microsoft "absolutely" intended to persuade Netscape not to compete and offered as a quid pro quo the prospect of Microsoft's staying out of browser development for non-Windows platforms. See Jones Dep., 208:5 - 209:6; 211:22 - 212:6. Plaintiffs allege that Microsoft's offer was part of a larger pattern of conduct that included similar discussions with Intel, Apple, and Real Networks. See infra at 11.

The test of conduct necessary to prove an attempt claim is, of course, substantially more demanding than the requirements for illegal monopolization. See, e.g., Transamerica Computer Co., Inc. v. IBM, 698 F.2d 1377, 1382 (9th Cir. 1983) (if conduct is not monopolization, it is not attempt either). The conduct must be sufficiently hostile toward competition so as to be branded "predatory," meaning an attempt to drive rivals from the market or to deter their entry. See Neumann v. Reinforced Earth Co., 786 F.2d 424, 427 (D.C. Cir. 1986). In support of their "attempt" claims, plaintiffs cite, among other behavior, the same conduct that supports their claims of tying and other unlawful restraints of trade. While Microsoft repeats its claims that it did not engage in any predatory behavior, the relevant facts are, as previously discussed, genuinely in dispute.

To sustain the attempted monopolization claim, plaintiffs must also prove a "dangerous probability"of Microsoft's succeeding in its effort to monopolize the market for Internet browsers. To prove a "dangerous probability," courts generally require plaintiffs to show that a defendant has a certain minimum market share. In Lorain Journal v. United States, 342 U.S. 143 (1951), for example, the Supreme Court upheld a judgment that a newspaper had attempted to monopolize the sale of advertising by refusing to deal with advertisers who purchased advertising from a local radio station. The Supreme Court took particular note of the newspaper's market power and the likelihood that the boycott would eventually eliminate the broadcaster-competitor. See id. at 152-54.

The Fourth Circuit has articulated the market share requirement as follows: "(1) claims of less than 30% market shares should presumptively be rejected; (2) claims involving between 30% and 50% shares should usually be rejected, except when conduct is very likely to achieve monopoly or when conduct is invidious . . ., (3) claims involving greater than 50% share should be treated as attempts at monopolization when the other elements for attempted monopolization are also satisfied." See M&M Med. Supplies & Serv. v. Pleasant Valley Hosp., 981 F.2d 160, 168 (4th Cir. 1992) (en banc).

According to plaintiffs, the latest data from a commercial market research firm show that as of February 1998, Internet Explorer had a 58% share of the browser market, with Navigator at 40%. See Sibley Decl. ¶ 29 & Table 3. Courts have found a dangerous probability of success on a comparable share of the market. See, e.g., McGahee v. Northern Propane Gas Co., 858 F.2d 1487, 1506 (11th Cir. 1988) ("[A] sixty or sixty-five percent market share is a sufficiently large platform . . . to create a genuine issue of material fact as to whether . . . [the defendant] would succeed in achieving a monopoly."); Kelco Disposal, Inc. v. Browning-Ferris Indus., 845 F.2d 404, 409 (2d Cir. 1988) (55% share sufficient), aff'd, 492 U.S. 257 (1989).

Microsoft agrees that its browser "usage share" has increased in the last several years. It argues, however, that IE's success is due to the rapid addition of features and functionality, rather than any anticompetitive conduct. Moreover, Microsoft also contends that Netscape is still the market leader: Netscape's own June 1998 internal marketing studies show that the usage share for Navigator is 56.7% while IE's share is 37.2%. Microsoft correctly points out that courts rarely find a market share between 30% and 50% sufficient to establish a dangerous probability of monopolization. See, e.g., U.S. Anchor Mfg. v. Rule Indus., Inc., 7 F.3d 986, 1001 (11th Cir. 1993) (less than 50% market share insufficient "as a matter of law"); Indiana Grocery, Inc. v. Super Valu Stores, Inc., 864 F.2d 1409, 1415 (7th Cir. 1989) (nearly 50% share insufficient); Broadway Delivery Corp. v. United Parcel Serv. of Am., 651 F.2d 122, 129 (2d Cir. 1981) (share below 50% precludes finding of dangerous probability absent "significant evidence concerning the market structure to show that the defendant's share . . . gives it monopoly power").

Microsoft also argues that, regardless of market share, in order to prove attempted monopolization, plaintiffs must show that the structure of the browser market lends itself to monopolization. See Colorado Interstate Gas Co. v. Natural Gas Pipeline Co. of Am., 885 F.2d 683, 694 (10th Cir. 1989) (defendant must have "the ability to propel itself to monopolistic control over the market"). Microsoft argues that the "fast-moving nature of the software business – where no single firm can gain control over productive assets" – makes it highly unlikely that any firm could ever acquire the power to control prices or exclude competition, regardless of its market share. See, e.g., Dial A Car, Inc. v. Transportation, Inc., 82 F.3d 484, 486-87 (D.C. Cir.

1996) (no unlawful attempt absent indication that monopolization of corporate car service business in District of Columbia is even possible). Plaintiffs disagree, contending that the structure of the browser market – like the operating system market – lends itself to dominance by one firm.

The statements of Microsoft executives, when considered in conjunction with other evidence of anticompetitive behavior (including the evidence supporting the § 1 claims as well as evidence that Microsoft may have sought to induce Netscape to agree to an illegal market allocation), at least raises a question as to Microsoft's intent to monopolize the browser market. Plaintiffs, of course, must prove that Microsoft intended to do more than "compete vigorously." Similarly, whether or not Microsoft's conduct was "predatory" is not an issue that can be properly decided as a matter of law. And whether Microsoft may be deemed to have a "dangerous probability" of monopolizing the browser market depends primarily on Microsoft's and Netscape's relative shares of the browser market, a question that is sharply disputed. Consequently, the Court must deny Microsoft's motion for summary judgment on plaintiffs' attempted monopolization claims.

VII.

The States bring a separate claim of monopoly "leveraging" under § 2. Under this theory, first recognized by the Second Circuit in dictum[23] in Berkey Photo v. Eastman Kodak Co., 603 F.2d 263, 276 (2d Cir. 1979), a seller who has a monopoly in one product violates § 2 when it uses a tie-in to obtain a competitive advantage in a second market, *"even if there has not been an*

[23] See Twin Lab., Inc. v. Weider Health & Fitness, 900 F.2d 566, 570 (2d Cir. 1990) (Second Circuit characterizing its Berkey Photo leveraging language as dictum).

attempt to monopolize the second market." See id. (ultimately not finding liability on this theory) (emphasis supplied).

The continuing viability of the monopoly leveraging theory is in serious doubt. The Supreme Court has offered conflicting views on the theory. In a footnote to Eastman Kodak Co. v. Image Technical Services, 504 U.S. 451, 479 n.29 (1992), the Supreme Court observed that it had "held many times that power gained through some natural and legal advantage such as a patent, copyright, or business acumen can give rise to liability if a seller exploits his dominant position in one market to expand his empire into the next." Less than a year later, however, the Supreme Court noted that "§ 2 makes the conduct of a single firm unlawful only when it actually monopolizes or dangerously threatens to do so." See Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 459 (1993). And in Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 775 (1984), the Supreme Court noted that "[b]ecause the Sherman Act does not prohibit unreasonable restraints of trade as such – but only restraints effected by a contract, combination, or conspiracy – it leaves untouched a single firm's anticompetitive conduct (*short of threatened monopolization*)." (emphasis supplied).

While those statements were dicta in cases not involving a "leveraging" claim as such, several courts have either rejected the theory outright or expressed extreme doubts about its viability. For example, in Alaska Airlines, Inc. v. United Airlines, Inc., 948 F.2d 536, 548 (9th Cir. 1991), the Ninth Circuit flatly rejected Berkey Photo's theory, holding that, "[u]nless the monopolist uses its power in the first market to acquire and maintain a monopoly in the second market, or to attempt to do so, there is no Section 2 violation." Similarly, in Fineman v. Armstrong World Industries, Inc., 980 F.2d 171, 205 (3d Cir. 1992), the Third Circuit relied on

Copperweld in holding that "Berkey Photo's formulation of monopoly leveraging to proscribe unilateral restraints of trade does violence to the text of the Sherman Act." But see Kerasotes Mich. Theatres v. National Amusements, Inc., 854 F.2d 135, 138 (6th Cir. 1988) (reversing dismissal of leverage claim).

The D.C. Circuit has never spoken definitively on the leveraging theory, but has noted "substantial academic criticism cast upon the leveraging concept." See Association for Intercollegiate Athletics for Women v. NCAA, 735 F.2d 577, 586 & n.14 (D.C. Cir. 1984). Professor Hovenkamp agrees that the idea that a seller can use a tie-in to enlarge monopoly profits has been "condemned repeatedly by commentators." See Herbert Hovenkamp, Federal Antitrust Policy 371 (1994). Assuming that Microsoft has an operating system monopoly and browsers are being sold competitively, Microsoft's incentive is to extract all available monopoly profits from the OS/browser *combination*. Accordingly, it already prices its operating system at the monopoly profit-maximizing price, considering what consumers are willing to pay for the entire package. Even if Microsoft were to obtain a monopoly in the market for browsers, the profit-maximizing price for the combination wouldn't change; Microsoft could not make additional monopoly profits even by monopolizing the browser market as well. See Hirsh v. Martindale-Hubbell, Inc., 674 F.2d 1343, 1349 n.19 (9th Cir. 1982).

In fact, the Ninth Circuit noted that "leveraging" may actually "tend to *undermine* monopoly power,"see Alaska Airlines, 948 F.2d at 549 (emphasis in original), since "[e]very time the monopolist asserts its market dominance on a firm in the leveraged market, the leveraged firm has more incentive to find an alternative supplier, which in turn gives alternate suppliers more reason to think they can compete with the monopolist." Id.

The Court will grant Microsoft's motion for summary judgment on the States' leveraging claim. While the Supreme Court has not considered a leveraging claim per se, it has clearly stated that a firm violates § 2 only when it actually monopolizes or dangerously threatens to do so. The Third and Ninth Circuits and many commentators have rejected the theory outright, as contrary to both economic theory and the Sherman Act's plain language.

VIII.

Finally, Microsoft contends that the States' pendent state-law claims, seeking to force Microsoft to alter its copyrighted operating system software (and to allow OEMs to do so), directly conflict with the copyright laws' goal of promoting the distribution of copyrighted works to the general public. See Harper & Row Publishers, Inc. v. National Enters., 471 U.S. 539, 558 (1985) (federal copyright laws' "encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors") (internal citation and quotation marks omitted). Microsoft repeats many of the same arguments it made in support of the boot and start-up screen restrictions, i.e., that it has an unfettered right to license (or not to license), and to prevent alterations to its copyrighted software. While courts have upheld the ability of states to regulate some aspects of copyrighted works, see, e.g., Fox Film Corp. v. Doyal, 286 U.S. 123, 131 (1932) (upholding ability of state to levy tax on copyright royalties); Associated Film Distribution Corp. v. Thornburgh, 683 F.2d 808, 814-17 (3d Cir. 1982) (upholding state regulation of certain procedures by which films were marketed and licensed to theaters), Microsoft argues, they have also recognized that a state law prohibiting the exercise of specific rights conveyed by the copyright laws would be invalid. See, e.g., Allied Artists Pictures Corp. v. Rhodes, 496 F. Supp. 408, 445 n.19 (S.D. Ohio 1980); Remick Music Corp. v. Interstate

Hotel Co., 58 F. Supp. 523, 544-45 (D. Neb. 1944) (invalidating state statute that interfered with copyright holder's ability to license public performances of copyrighted music).

"[T]he Supremacy Clause, U.S. Const. Art. VI, cl. 2, invalidates state laws that 'interfere with, or are contrary to,' federal law." Hillsborough County, Florida v. Automated Med. Lab., Inc., 471 U.S. 707, 712 (1985) (quoting Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 211 (1824)). State laws are "preempted" when they "stand[] as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." Hines v. Davidowitz, 312 U.S. 52, 67 (1941); accord Gade v. National Solid Wastes Management Ass'n, 505 U.S. 88, 98-99 (1992). But "[c]onsideration of issues arising under the Supremacy Clause starts with the assumption that the historic police powers of the States are not to be superseded by Federal Act unless that is the clear and manifest purpose of Congress." Cipollene v. Liggett Group, Inc., 505 U.S. 504, 516 (1992) (internal citation and quotation marks omitted).

It is fairly clear that the copyright laws do *not* preempt state antitrust statutes. The Copyright Act's preemption clause provides that "[n]othing in this title annuls or limits any rights or remedies under the common law or statutes of any State with respect to activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106." See 17 U.S.C. § 301(b)(3).

The Tenth Circuit recently addressed a similar preemption question. In Harolds Stores, Inc. v. Dillard Department Stores, Inc., 82 F.3d 1533 (10th Cir.), cert. denied, 117 S. Ct. 297 (1996), a retailer sued a competitor, alleging that the competitor's copying of fabric designs violated its copyrights and the state antitrust laws. The defendant argued that the antitrust law was preempted by the federal copyright scheme. Id. at 1543. The court rejected the defense, holding that "the restraint of trade component of [the state antitrust act] claim requires a litigant claiming a violation of [that act] to establish proof beyond that required to demonstrate a violation of the exclusive rights protected by § 106 of the Copyright Act, i.e., copying, preparation of derivative works, performance, distribution or display." Id.

As explained, supra, the Copyright Act does not give a copyright holder a license to engage in anticompetitive behavior that violates *federal* antitrust law. See, e.g., Data General Corp. v. Grumman Sys. Support Corp., 36 F.3d 1147, 1186-87 & n.63 (1st Cir. 1994) (it is "well settled that concerted and contractual behavior that threatens competition is not immune from antitrust inquiry simply because it involves the exercise of copyright privileges") (citations omitted); Allied Artists, 496 F. Supp. at 443-44 (holding that "ownership of a copyright does not entitle a company to abuse the market power it obtains thereby by engaging in a per se illegal tying arrangement"). Microsoft fails to articulate how *state* antitrust laws, which are based upon and largely emulate the federal scheme, see California v. ARC Am. Corp., 490 U.S. 93, 102 (1989) (state antitrust laws are consistent with broad purposes of federal antitrust laws), "conflict" with any right conferred by federal copyright law. The Supreme Court has recognized that there is "nothing either in the language of the copyright laws or in the history of their enactment to indicate any congressional purpose to deprive the states, either in whole or in part, of their long-recognized power to regulate combinations in restraint of trade." See Watson v. Buck, 313 U.S. 387, 404 (1941).

Furthermore, Microsoft has not established the extent of any copyright protection in the *specific* portions of software plaintiffs seek to modify, and the parties dispute whether Microsoft abused its copyright for anticompetitive purposes. Until those questions are resolved, Microsoft's copyright argument is premature at best.

For the foregoing reasons, it is, this ______ day of September, 1998,

ORDERED, that the motion of the defendant Microsoft Corporation for summary judgment on the plaintiff States' Third Claim for Relief is granted, and that claim is dismissed with prejudice; and it is

FURTHER ORDERED, that the motion of Microsoft Corporation for summary judgment is otherwise denied.

____

Thomas Penfield Jackson
U.S. District Judge